

Title (en)  
MIXER

Title (de)  
MIXER

Title (fr)  
MIXEUR

Publication  
**EP 3369995 A1 20180905 (EN)**

Application  
**EP 17159008 A 20170302**

Priority  
EP 17159008 A 20170302

Abstract (en)  
A mixer (7) comprising a housing (10), a duct (11) within the housing (10), a first and a second injector (12, 13) arranged to inject a fluid at a centre zone (18) of the duct (11), a third and a fourth injector (14, 15) arranged to inject the fluid at a wall zone (17) of the duct (11). The first/third injectors (12) are at a distance  $D1 = v/2f$  1 or odd integer multiples of it from the second/fourth injectors (13) in the absence of an acoustic node between them, or at a distance  $D1 = n \cdot v/f$  1 or full wave length integer multiples of it in the presence of an acoustic node between them. Advantageously  $f_1$  is greater than  $f_2$ .

IPC 8 full level  
**F23R 3/00** (2006.01)

CPC (source: CN EP US)  
**F23D 14/02** (2013.01 - CN); **F23D 14/48** (2013.01 - CN); **F23D 14/64** (2013.01 - CN); **F23R 3/00** (2013.01 - EP US); **F23R 3/002** (2013.01 - US); **F23R 3/045** (2013.01 - US); **F23R 3/06** (2013.01 - US); **F23R 3/283** (2013.01 - US); **F23R 3/286** (2013.01 - CN); **F23R 3/346** (2013.01 - US); **F23R 2900/00014** (2013.01 - EP US); **F23R 2900/03341** (2013.01 - EP US)

Citation (search report)  
• [A] EP 3037728 A1 20160629 - ALSTOM TECHNOLOGY LTD [CH]  
• [A] EP 3037726 A1 20160629 - ALSTOM TECHNOLOGY LTD [CH]  
• [A] EP 3037725 A1 20160629 - ALSTOM TECHNOLOGY LTD [CH]

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Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3369995 A1 20180905**; **EP 3369995 B1 20200805**; CN 108534137 A 20180914; CN 108534137 B 20210924; US 11454398 B2 20220927; US 2018252412 A1 20180906; US 2021172606 A1 20210610

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**EP 17159008 A 20170302**; CN 201810174380 A 20180302; US 201815907953 A 20180228; US 202117174939 A 20210212